THE
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Examining the Atmosphere and Atmospheric Resource Management

Montana considering cloud seeding program

By Darin Langerud

On June 1, the North Dakota Cloud Modification Project (NDCMP) began once again in the skies over western North Dakota. Many of the counties in the program have been conducting cloud seeding operations to reduce hail damage and increase rainfall for over 40 years.

During this time, positive evaluations of the NDCMP have made many in the United States and around the world take notice. Now, one of North Dakota's neighbors is taking a look at what benefits cloud seeding technology may hold for them.

The Montana Farmer's Union held a conference on cloud seeding in Great Falls, MT, on June 3. The conference was intended to educate the public and explore the advantages of cloud seeding.

Speakers at the conference included: Karl Ohs, Montana Lieutenant Governor, Jim Sweeney, Bruce Boe, and Dr. Terry Krauss of Weather Modification Inc., Paul Azevedo of the Montana Department of Natural Resources and Conservation, and Darin Langerud of the NDARB.

Speakers addressed winter and summer programs, their benefits and limitations, evaluations of cloud seeding, economic benefits from nearby programs, and regulations governing the application of cloud seeding in Montana.

The conference was attended by well over 100 people and covered by print, radio, and television in Montana and around the region.

A topic which received great attention was the regulatory requirements in the state. Montana law was changed in 1993 to require applicants to pay for an Environmental Impact Statement (EIS) as a part of the permitting process for cloud seeding operations. In addition, Montana regulations require $10 million in liability insurance. These requirements are over and above the requirements in North Dakota and other states that have ongoing cloud seeding operations and concern was expressed that they could be restrictive to operations in the state.

In fact, since 1993 these regulations, and their associated expenses, have kept North Dakota from obtaining a permit in eastern Montana to seed clouds that are moving into NDCMP target counties.

Montana is a geographically diverse state, with rolling plains, much like western North Dakota, in the east, and the Rocky Mountains in the west. This diversity lends the possibility of winter and summer cloud seeding operations over the Big Sky state.

Winter operations could be employed in the Rockies and other mountain ranges to increase snowpack, boosting the amount of spring runoff into the many rivers winding their way to the valleys below. Evaluations from other mountainous western states have shown well-run cloud seeding programs can increase snowpack by at least 10 percent annually. Effects from such a program in Montana may have impacts in North Dakota if snowfall in the Missouri and Yellowstone river basins could be significantly increased by operations.

Likewise, summer operations in Montana hold promise as the climate in eastern Montana and western North Dakota are essentially the same. Cloud seeding for hail suppression and rainfall enhancement has the potential to be as beneficial to Montana as it has been in western North Dakota.

This conference is a starting point and likely the first of many such meetings in Montana. Already another conference is scheduled for July 25 in Billings, MT. A number of things have to fall in place before cloud seeding operations commence in the skies over Montana. We will keep an interested eye on how things progress and provide an update in this column when a decision is made. ■

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